

Why a Roundabout?

SAFETY

- ✧ Roundabouts are safer than traditional intersection treatments
- ✧ The number of intersection conflict points are reduced
- ✧ When accidents do occur, the lower speeds in the roundabouts tend to result in less severe accidents, and fewer injuries.

Traffic Operations

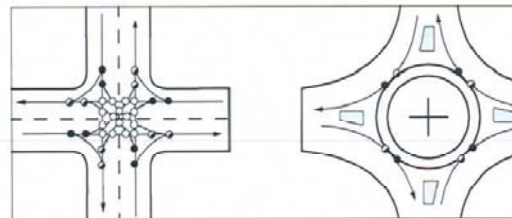
- ✧ Simplified movements – one way flow
- ✧ Lower overall operating speeds and speed consistency
- ✧ Greater capacity than four way stop controlled and some signalized intersections
- ✧ Decreased overall delay

Other Considerations

- ✧ Serves as traffic calming measure
- ✧ Provides aesthetic opportunity for landscaped island
- ✧ Can serve as a gateway to the community
- ✧ May have a higher construction cost than a signalized intersection but maintenance cost are generally lower for roundabouts
- ✧ Can be designed to accommodate larger vehicles

Research

- ✧ At 11 roundabouts in Maryland, the average accident rate reduced by 60% and injury related accidents reduced by 86%. (Source: Maryland State Highway Administration)
- ✧ A similar national study of 24 roundabouts found the average accident rate reduced by 39%, and injury related accidents reduced by 76%. (Source: Insurance Institute for Highway Safety Status Report).
- ✧ The decrease in accident rates is often attributed to the reduction of conflict points at a roundabout:



Signaled intersection:
32 conflict points

Roundabout:
8 conflict points

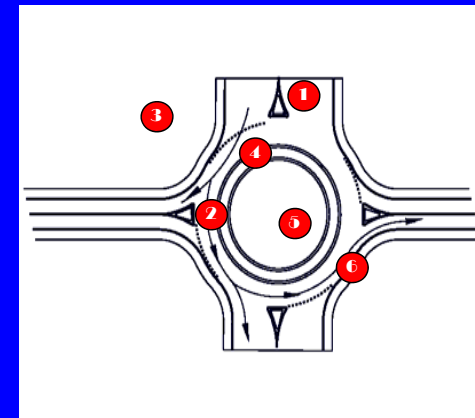


Intersection before installation of Roundabout



Intersection after installation of Roundabout

- 1 "Splitter islands" are raised or painted areas used to separate entering and existing traffic, to guide and slow entering traffic, and provide refuge for pedestrians and bicyclists.
- 2 All vehicles are "deflected" or guided by the roundabout's central island, resulting in lower speeds overall.
- 3 Vehicles entering the roundabout must yield to circulating traffic.
- 4 A mountable "apron" may be necessary to accommodate large vehicles.
- 5 The "central island" is the raised center of a roundabout and can be landscaped for improved aesthetics.
- 6 All vehicles circulate counter clockwise around and pass to the right of the central island.



Driving a Roundabout

SLOW DOWN upon entry. Speeds of 15 mph or less are adequate.

YIELD to any vehicle in the roundabout. Remember to be prepared to stop.

ENTER the roundabout. Once inside, do not stop. You have the right-of-way.

LOOK for your destination sign. Exit the roundabout toward your destination. Remember to use your turn signal.

ON A BICYCLE? Use the same vehicular movements.